CLAIMS

WHAT IS CLAIMED IS:

1.   A method of transmitting data, the method comprising the steps of:

providing a group of data;

minimizing a probability of occurrence of a group of N binary values in the group

of data; and

5   assigning an elevated electromagnetic pulse transmission rate to at least one group

of N binary values having an elevated probability of occurrence.

2.   The method of claim 1, wherein the step of minimizing the probability of

occurrence of the group of N binary values comprises eliminating the group of N binary

values from the group of data.

10   3.   The method of claim 1, wherein the step of minimizing the probability of

occurrence of the group of N binary values comprises:

eliminating the group of N binary values from the group of data so that only $2^X - 1$

groups of N binary values are assigned to an elevated electromagnetic pulse transmission

rate.

15   4.   The method of claim 1, wherein the group of N binary values is a group of bits

selected from a group consisting of: a 4-bit group, a 6-bit group, a 8-bit group, a 16-bit

group, a 32-bit group, a 64-bit group and a 128-bit group.

5.   The method of claim 1, wherein the elevated electromagnetic pulse transmission

rate may range between about 100 million pulses per second to about 1 billion pulses per

20   second.

6. The method of claim 5, wherein the pulses are selected from a group consisting of: ultra-wideband pulses and impulse radio pulses.

7. The method of claim 1, wherein the transmitted data is selected from a group consisting of: telephony data, high-speed data, video data, television data, Internet communication data and audio data.

8. The method of claim 1, wherein the data is transmitted through a media that is selected from a group consisting of: air, an optical fiber ribbon, a fiber optic cable, a single mode fiber optic cable, a multi mode fiber optic cable, a twisted pair wire, an unshielded twisted pair wire, a plenum wire, a PVC wire, a coaxial cable, and an electrically conductive material.

9. The method of claim 1, wherein the data is transmitted substantially simultaneously with a wire network communication signal.

10. A computer program product for directing a general purpose digital computer to perform a desired function comprising:

a set of computer readable instructions for minimizing a probability of occurrence of a group of N binary values in a group of data; and

a set of computer readable instructions for assigning an elevated electromagnetic pulse transmission rate to at least one group of N binary values having an elevated probability of occurrence.

11. The computer program product of claim 10, wherein minimizing the probability of occurrence of the group of N binary values comprises a set of computer readable instructions for eliminating the group of N binary values from the group of data.

12. The computer program product claim 10, wherein minimizing the probability of occurrence of the group of N binary values comprises:

a set of computer readable instructions for eliminating the group of N binary values from the group of data so that only $2^X - 1$ groups of N binary values are assigned to an elevated electromagnetic pulse transmission rate.

13. The computer program product of claim 10, wherein the group of N binary values is a group of bits selected from a group consisting of: a 4-bit group, a 6-bit group, a 8-bit group, a 16-bit group, a 32-bit group, a 64-bit group and a 128-bit group.

14. The computer program product of claim 10, wherein the elevated electromagnetic pulse transmission rate may range between about 100 million pulses per second to about 1 billion pulses per second.

15. The computer program product of claim 14, wherein the pulses are selected from a group consisting of: ultra-wideband pulses and impulse radio pulses.

16. A method of transmitting data, the method comprising the steps of:

means for providing a group of data;

means for minimizing a probability of occurrence of a group of N binary values in the group of data; and

means for assigning an elevated electromagnetic pulse transmission rate to at least one group of N binary values having an elevated probability of occurrence.

17.   The method of claim 16, wherein the step of means for minimizing the probability of occurrence of the group of N binary values comprises means for eliminating the group of N binary values from the group of data.

18.   The method of claim 16, wherein the step of means for minimizing the probability of occurrence of the group of N binary values comprises:

eliminating the group of N binary values from the group of data so that only $2^X - 1$ groups of N binary values are assigned to an elevated electromagnetic pulse transmission rate.

19.   The method of claim 16, wherein the group of N binary values is a group of bits selected from a group consisting of: a 4-bit group, a 6-bit group, a 8-bit group, a 16-bit group, a 32-bit group, a 64-bit group and a 128-bit group.